

EXHIBIT B

Highly Confidential - Larry Russell

1 UNITED STATES DISTRICT COURT
2 EASTERN DISTRICT OF MICHIGAN
3 SOUTHERN DIVISION
4 _____
5 In re: FLINT WATER CASES)
6 _____) Civil Action No.
7) 5:16-cv-10444-JEL-MKM
8 Elnora Carthan, et al.,) (consolidated)
9)
10 Plaintiffs,)
11 vs.) Hon. Judith E. Levy
12) Mag. Mona K. Majzoub
13 Governor Rick Snyder,)
14 et al.,)
15 Defendants.)
16 and)
17 Bellwether III)
18 Case No. 17-10164)
19 _____)

20 HIGHLY CONFIDENTIAL
21 Wednesday, December 28, 2022
22 Volume I
23 Remote videotaped deposition of
24 LARRY L. RUSSELL, Ph.D., commencing at 9:02 a.m., on
the above date before Carol A. Kirk, Registered Merit
Reporter, Certified Shorthand Reporter, and Notary
Public.

25 GOLKOW LITIGATION SERVICES
26 877.370.3377 ph | 917.591.5672 fax

1 it 9?

2 MR. PIPOLY: 9 and 10.

3 MR. TER MOLEN: I'm sorry?

4 MR. PIPOLY: 9 and 10.

5 MR. CONNORS: Please include a
6 link to them in the chat.

7 MR. BERT: That will be Exhibit 9.

8 MR. CONNORS: Thank you. Which is
9 which?

10 MR. PIPOLY: Exhibit 9 will be
11 20-04.

12 - - -

13 (Russell Deposition Exhibit 9 marked.)

14 - - -

15 (Russell Deposition Exhibit 10 marked.)

16 - - -

17 BY MR. TER MOLEN:

18 Q. All right. Dr. Russell, showing
19 you what we've marked as Exhibit 9, which is the
20 National Society of Professional Engineers
21 that's identified as Case Number 20-04. And
22 you've obviously seen this since you cited it in
23 your report; is that right?

24 A. Yes.

1 Q. Okay. And we can scroll down if
2 you want to, Doctor. It's, what, a four-page
3 document, three-page document. It's not
4 terribly long.

5 And going to the top, if you look
6 at the top right, you see it says, "NSPE Board
7 of Ethical Review."

8 Is that right?

9 A. Yes.

10 Q. And it says, "Approved 7-1-21."

11 Am I reading that right?

12 A. Yes.

13 Q. What does the approved date mean,
14 if you know?

15 A. I don't know. But I would assume
16 that it's the publication date.

17 Q. Okay. And if you go to the last
18 page, you'll see that there are signators, eight
19 different signators, I guess, the Board of
20 Ethical Review?

21 A. Yes.

22 Q. If you know, is it these eight
23 individuals who are approving this document?

24 A. I don't know.

1 Q. Okay. Have you -- we may have
2 talked about this at your first deposition,
3 Doctor, but I just forget. Have you been
4 involved with the NSPE?

5 A. Yes.

6 Q. Okay. Can you just briefly
7 describe for me what your involvement has been.

8 A. I'm a member, and I have
9 participated in ethical classes in the State of
10 Michigan conducted by the Michigan branch of the
11 NSPE.

12 Q. Okay. And when were you involved
13 in those classes?

14 A. Six months ago.

15 Q. Were those classes associated at
16 all with Flint or anything -- what were they
17 associated with, if anything?

18 A. As you're aware, I'm a registered
19 engineer in the State of Michigan, and I have
20 continuing education requirements, as you guys
21 do, that I have to fulfill, and it was part of
22 that effort.

23 I also have those conditions in
24 Florida, and New Mexico, and Texas, and a few

1 other states. So I routinely take these classes
2 for that purpose.

3 Q. Okay. Well, why don't we walk
4 through this opinion, Dr. Russell. I'm just
5 going to read parts of this, hopefully not the
6 whole thing, but parts of it, and then we'll
7 chat about it, okay?

8 A. Sure.

9 Q. Under the Facts, it says,
10 "Engineer A is a professional engineer who
11 serves as a superintendent and chief engineer
12 for the Metropolitan Water Commission, and in
13 order to reduce expenditures and lower water
14 rates, the MWC has been considering changing its
15 water supply source from purchasing water from
16 remote reservoirs to using the local river as
17 the MWC's source.

18 "Engineer B, a consulting engineer
19 retained by the MWC, charged with evaluating
20 water treatment needs for the change in water
21 source, provided a report to engineer A at the
22 MWC recommending extensive capital investments
23 and a three-year timeline for further evaluation
24 of water quality, design, and construction of

1 improvements.

2 "The improvements are needed prior
3 to the change in water source to ensure that
4 sufficient corrosion control is provided so that
5 all service pipes in the MWC service area don't
6 leach lead at levels in excess of drinking water
7 standards.

8 "Both engineer A and engineer B
9 met with the MWC at a meeting sparsely attended
10 by the public and recommended that the change in
11 water source B is delayed until improvements
12 could be completed.

13 "Despite those recommendations,
14 the MWC voted to proceed simultaneously with
15 accelerated evaluation and design of needed
16 water treatment improvements and the change in
17 water source."

18 Did I, at least, capture the gist
19 of this by my reading, Dr. Russell?

20 A. Yes.

21 Q. Okay. And so then they go on to
22 have some discussion of the various other cases
23 here. And I'm looking now at the second page
24 moving toward the bottom.

1 They say that "If engineers A
2 and B believe life or property is endangered,
3 Section II.1.a provides that not only shall the
4 employer or client be notified but also all
5 other appropriate authorities."

6 And it goes on, "It appears the
7 state regulatory agency has been contacted.
8 However, there should be a formal presentation
9 of the facts, findings, and recommendations.

10 "This action may also address
11 Section II.1.c, as engineers A and B are
12 required to hold paramount the safety, health,
13 and welfare of the public, and as this duty is a
14 fundamental canon of the Code of Ethics, the
15 consent of the MWC is not required."

16 Again, did I at least get the gist
17 of that?

18 A. I think so.

19 Q. Okay. And then it goes on to say,
20 "Additionally, if the project success is defined
21 as the public will not be endangered at all,
22 then engineers A and B should advise their
23 client that they believe the project will not be
24 successful."

1 Okay. And then they go into -- on
2 the third page, they go into the conclusions.
3 And they've got two conclusions, which are
4 I think pretty similar to what we've read
5 already.

6 And can you tell me, Dr. Russell,
7 with respect to Veolia what in this opinion you
8 rely on as a basis for your assertion that
9 Veolia violated ethical obligations with respect
10 to how it conducted its work in Flint?

11 A. Okay. As is repeated in this
12 summary over and over again, the engineers have
13 the ethical obligation to first report to their
14 client what the problem is. In the event the
15 client overrules them, they then are obligated
16 to report to others.

17 Now, it's a little vague who
18 others are. If you'll recall in my first
19 deposition, we discuss this with respect to
20 TSCA, the obligations under TSCA with respect to
21 when, you know, something is hazardous and it's
22 being released. The engineer is obligated to go
23 beyond their client in that event. It's
24 obviously a great peril, but you still have to

1 do it.

2 So what I read from this document
3 and why it was included is it's obviously
4 talking about Flint. And it's talking about
5 what the engineers have to do in terms of
6 reporting their concerns to the state agency and
7 so forth to meet their ethical obligation. And
8 if you don't do that, then you've dropped the
9 ball and you're below the standard of care.

10 Q. Okay. So my question was focusing
11 on Veolia, Dr. Russell. So just to drill down a
12 bit here, engineer A in this case, is engineer A
13 effectively Veolia?

14 A. Well, you could pick your choice,
15 Mr. Ter Molen, A or B. I don't know that
16 there's so much difference between them.

17 Q. Well, I mean, here the facts
18 are -- it says, "Engineer A is a professional
19 engineer who serves as a superintendent and
20 chief engineer for the water authority," right?
21 I mean, clearly that's not -- that's not VNA,
22 right?

23 A. Okay. Okay.

24 Q. Do you agree with me?

1 A. Well, it depends on how you see
2 the way VNA relates to their client, as was
3 testified by the chief operator. You know, they
4 were looking for expertise to come in from the
5 outside to guide them through these problems.

6 And while they're not -- I agree
7 with you, VNA is not the chief operator, they
8 were intending to be the chief operator. They
9 definitely were aimed in that direction through
10 their proposal. That's exactly where they were
11 headed, and -- so, anyway, I don't know if that
12 answers what you're after, but ...

13 Q. Well, VNA was never hired by the
14 city to be the operator of the plant; is that
15 right?

16 A. Yes.

17 Q. Okay. And engineer B, it says
18 here, is a consulting engineer charged with
19 evaluating water treatment needs for the change
20 in water source retained before the city had
21 done the change in water source; is that right?

22 A. I don't know. You were going
23 pretty fast when you were reading, so I don't
24 recall --

1 Q. Why don't we go back to page 1
2 here.

3 A. Okay. Let's do it.

4 Q. You can read it at your leisure
5 here.

6 So, again, engineer B is a
7 consulting engineer retained before the city has
8 changed its water sources, right?

9 A. Yes.

10 Q. Okay. That's not VNA either,
11 correct?

12 MR. CONNORS: Objection; vague and
13 ambiguous.

14 A. No, but it exactly describes LAN.

15 Q. Okay. And there is no -- in this
16 case number, there is no engineer C who was
17 retained some months later after the water
18 source had been -- the switch had been made and
19 when the city was trying to address problems,
20 right?

21 MR. CONNORS: Objection; assumes
22 facts not in evidence. And I move to
23 strike counsel's comment.

24 A. I would agree with you there's no

1 engineer C.

2 Q. Okay. And if we look at the NSPE
3 code at issue here, and that's -- you can see
4 it. It's in the third section here under NSPE
5 Code of Ethics references. There's -- it says,
6 "If engineer's judgment is overruled under
7 circumstances that endanger life or property,
8 they shall notify their employer or client and
9 such other authority as may be appropriate."

10 Do you see that?

11 A. Yes.

12 Q. Okay. And with respect to VNA
13 here, was there an instance, in your opinion,
14 Dr. Russell, where the City of Flint or others
15 working on behalf of the City of Flint overruled
16 VNA in a manner that endangered life or
17 property?

18 A. That's a very interesting and
19 involved question.

20 One of the complaints that
21 I recall from VNA was that they, the city,
22 didn't implement all of their recommendations.
23 One that I believe is a perfect example of that
24 is the request to increase the ferric chloride.

1 Now, I think it's fortunate that
2 the city didn't follow that recommendation from
3 Veolia, because if they had increased the ferric
4 chloride, it would have made the situation even
5 worse. So -- but that's clearly a situation
6 where the city overruled Veolia's
7 recommendation.

8 Now, the question about
9 endangering life or property, well, that gets
10 pretty complicated. If Veolia had made the
11 recommendation I would have hoped they would
12 make, which would be to switch back to alum,
13 which is the old aluminum sulfate -- it's the
14 old coagulant that was used back at this plant
15 back when the plant was treating the water
16 before '67 -- then this issue would be much
17 clearer, because if they had recommended going
18 to all alum and the city refused to do that,
19 then one could argue that going to ferric
20 chloride endangered the life or property. So,
21 you know, what's important, Mr. Ter Molen, is to
22 recognize these are very broad and general ideas
23 presented here.

24 The takeaway from this is -- I

1 don't know if it's 11.1 or II.1, the first one.

2 That's the issue that's being discussed here.

3 The second one is just an example
4 of some of the things you run into in these
5 ethics courses. And, you know, it's an
6 obligation of the engineer to make sure they do
7 everything they can to protect the public
8 health.

9 So, like I say, the circumstances
10 here perhaps don't exactly fit this ethical
11 question, but they do fit the intent of what's
12 being implied here, in my opinion.

13 Q. Dr. Russell, did the City of Flint
14 ever tell VNA that the city was not going to
15 implement any of the recommendations VNA made?

16 MR. STERN: Objection; foundation,
17 outside the scope of his expertise, and
18 outside the scope of his opinions.

19 A. Well, beyond that, I can't really
20 know that. I'm not privy to the conversations
21 between Veolia and the city. So all I can look
22 at is the parts of the reports that didn't get
23 done. And, you know, there was no corrosion
24 study. There was no implementation of a higher

1 ferric chloride dose.

2 And this is where things get
3 stickier. You have to look at water quality as
4 like a puzzle. You have to satisfy all the
5 pieces of the puzzle.

6 You can't just worry about the
7 disinfection byproducts. You have to think
8 about what's going to happen to corrosion,
9 what's going to happen to lead concentrations if
10 we do this.

11 And that's the part I don't think
12 ever got fully digested at Veolia. And it
13 surely didn't get digested in their
14 recommendations. I don't know if the city lost
15 confidence in Veolia. I don't know why they
16 didn't institute them, but it's my understanding
17 they didn't institute many, if any, of the
18 recommendations.

19 Q. Okay. And sitting here today,
20 Dr. Russell, you're not aware of any formal or
21 specific communication from the city to VNA that
22 the city was not going to implement some or all
23 of VNA's recommendations; is that fair?

24 A. In order to answer that,

1 Mr. Ter Molen, I would need to go back and
2 review Rob Nicholas' testimony, as well as the
3 attachments. I don't recall that discussion in
4 the body of those documents, but I can't sit
5 here and say it's not there without looking.

6 Q. Okay. And let's give you a
7 hypothetical, okay?

8 You're a consulting engineer and
9 you make recommendations to a city which you
10 believe will address the issues that they're
11 having with their drinking water. The city
12 says, "We're going to implement your
13 recommendations. Thank you very much."

14 And you go away, and years later
15 you discover that they haven't, okay?

16 A. Yes.

17 Q. Are you with me so far? Okay.

18 So let me ask you, do you as a
19 consulting engineer have an obligation to
20 monitor the city as to whether or not they are
21 implementing your recommendations after you
22 leave?

23 MR. CONNORS: Objection. This
24 line of questioning could have and

1 should have been asked at the last
2 deposition. It is not targeted at all
3 at the opinions and reports that have
4 come since then. And it is against what
5 Mr. Ter Molen represented to the Court.

6 There have been many instances of
7 that today. So I'm going to put that
8 objection on the record.

9 MR. STERN: I join fully.

10 A. And for the record, that question
11 was asked and answered in the previous
12 deposition, as I recall.

13 But let me just take a little pop
14 at it. We are consultants who specialize in
15 very difficult problems, and we are the
16 consultants that solve the problems that others
17 can't.

18 So I can't think of an example off
19 the top of my head where what you just proposed
20 didn't -- isn't what happened. In other words,
21 when we make a recommendation, it gets done. We
22 work with the client and we try to really get in
23 their shoes.

24 We spend the money like it's their

1 money, like our money, for them. We're very
2 cautious about that. So I don't know that I've
3 ever experienced that event that you're talking
4 about.

5 I have had clients choose an
6 alternative which maybe wouldn't be the
7 alternative I would prefer, but it's one of our
8 presentations. I mean, it's not random. It's,
9 you know, we presented alternatives to them at
10 different costs, and they chose the one that
11 they preferred. That, of course, is their full
12 prerogative.

13 I don't give up easy,
14 Mr. Ter Molen, and I would definitely stay in
15 touch with the client and monitor the situation,
16 absolutely, even though I'm not getting paid,
17 absolutely, because it's important to me
18 professionally.

19 Q. Okay. That's good to know,
20 Dr. Russell.

21 Why don't we show you what has
22 been marked as Exhibit 10 here. This is the
23 position paper that you reference in your
24 report.

1 And you state in your report that
2 the NSPE was adopted in Michigan in 2021?

3 A. Yes.

4 Q. And there was not an NSPE code of
5 ethics that had been adopted in Michigan before
6 2021; is that right?

7 A. That's my understanding.

8 Q. Okay. That's fine.

9 Now, shifting gears, Doctor, to
10 your opinion 15. This is on page 6 of your
11 report, Exhibit 5, Dr. Russell.

12 You state here that "Veolia should
13 have presented reconnecting to the DWSD system
14 as the recommended option, and that by not doing
15 so, Veolia violated three engineering standard
16 of care requirements."

17 Right?

18 A. Yes.

19 Q. And you cite here the Exhibit 10
20 that we've got up on -- or that we had up on the
21 screen a minute ago; is that right?

22 A. I don't know the exhibit number,
23 but --

24 Q. The NSPE Michigan code that was